Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

1. (Currently amended). [[A]] An isolated G protein-coupled receptor protein selected from the group consisting of:

(a) a polypeptide comprising the ~~protein having an~~ amino acid sequence ~~selected from the group consisting~~ of SEQ ID NO:4~~, 5, 6, 28, 29, 30, and 31~~; and

(b) a polypeptide comprising the ~~protein having an~~ amino acid sequence ~~selected from the group consisting~~ of SEQ ID NO:4, ~~5, 6, 28, 29, 30, and 31, wherein~~ in which one to thirty amino acids ~~of the protein are modified by deletion, addition, insertion, and/or substitution~~ are deleted, added, inserted or substituted by another amino acid residue~~.~~ ~~; and~~

~~(c) a protein encoded by DNA that hybridizes under highly stringent conditions with DNA consisting of a sequence selected from the group consisting of SEQ ID NO:1, 2, 3, 24, 25, 26, and 27.~~

2. (Original) A fusion protein comprising the protein of claim 1 and another peptide or polypeptide.

3. (Currently amended) An antigenic ~~A functional~~ fragment of the ~~protein~~ polypeptide of claim [[1]] 14.

4. (Currently amended) [[A]] An isolated DNA encoding the protein of claim 1.

5. (Original) A vector comprising the DNA of claim 4 inserted therein.

6. (Original) A transformant carrying the DNA of claim 4 in an expressible manner.

7. (Currently amended) A method of producing a protein, the method comprising ~~the steps of:~~ cultivating the transformant of claim 6, and recovering the protein expressed therein.

8. (Currently amended) A method of screening for a compound that binds to a G protein-coupled receptor protein, the method comprising ~~the steps of~~:

(a) exposing a test sample to the protein of claim 1, and

(b) selecting a compound that binds to the protein.

9. (Cancel)

10. (Withdrawn) An antibody that binds to the protein of claim 1.

11. (Withdrawn) A method of detecting or measuring a G protein-coupled receptor protein, the method comprising the steps of: exposing the antibody of claim 10 to a test sample, and detecting or measuring the generation of an immune complex between said antibody and said protein.

12. (Currently amended) [[A]] An isolated DNA of a length of 15 nucleotides or longer that hybridizes ~~under highly stringent conditions~~ at 65°C in 2x SSC and 0.1% SDS with a DNA consisting of a nucleotide sequence selected from the group consisting of SEQ ID NO:1 ~~NOs: 1, 2, 3, 24, 25, 26, 27,~~ and the ~~complements~~ complement of SEQ ID NO:1. ~~NOs: 1, 2, 3, 24, 25, 26, and 27.~~

13. (New) An isolated polypeptide, the sequence of which comprises SEQ ID NO:4.

14. (New) The isolated polypeptide of claim 13, wherein the sequence of the polypeptide consists of SEQ ID NO:4.

15. (New) An isolated DNA comprising a nucleotide sequence encoding a polypeptide consisting of SEQ ID NO:4.

16. (New) The isolated DNA of claim 15, comprising nucleotides 9-947 of SEQ ID NO:1.

17. (New) A vector comprising the DNA of claim 15.

18. (New) A transformant carrying the DNA of claim 15 in an expressible manner.

19. (New) A host cell comprising the vector of claim 5.

20. (New) A host cell comprising the vector of claim 17.

21. (New) The transformant of claim 6, wherein the transformant expresses the protein.

22. (New) The host cell of claim 19, wherein the host cell expresses the protein.

23. (New) The host cell of claim 20, wherein the host cell expresses the polypeptide.

24. (New) A method of producing a protein, the method comprising cultivating the transformant of claim 21 and recovering the protein expressed therein.

25. (New) A method of producing a protein, the method comprising cultivating the host cell of claim 22 and recovering the protein expressed therein.

26. (New) A method of producing a polypeptide, the method comprising cultivating the host cell of claim 23 and recovering the polypeptide expressed therein.

27. (New) An isolated fusion protein comprising SEQ ID NO:4 and another amino acid sequence.

28. (New) An isolated fusion protein comprising (a) a first sequence consisting of SEQ ID NO:4, in which one to thirty amino acids are deleted, added, inserted or substituted by another amino acid residue; and (b) another amino acid sequence.

29. (New) An isolated DNA encoding the fusion protein of claim 2.

30. (New) An isolated DNA encoding the fusion protein of claim 27.

31. (New) An isolated DNA encoding the fusion protein of claim 28.

32. (New) A host cell comprising the isolated DNA of claim 29.

33. (New) A host cell comprising the isolated DNA of claim 30.

34. (New) A host cell comprising the isolated DNA of claim 31.

35. (New) A method of producing a protein, the method comprising cultivating the host cell of claim 32 and recovering the fusion protein expressed therein.

36. (New) A method of producing a protein, the method comprising cultivating the host cell of claim 33 and recovering the fusion protein expressed therein.

37. (New) A method of producing a protein, the method comprising cultivating the host cell of claim 34 and recovering the fusion protein expressed therein.

38. (New) A vector comprising the DNA of claim 29.

39. (New) A vector comprising the DNA of claim 30.

40. (New) A vector comprising the DNA of claim 31.

41. (New) The method of claim 8, wherein the protein comprises SEQ ID NO:4.

42. (New) The method of claim 8, wherein the protein consists of SEQ ID NO:4.

43. (New) The method of claim 8, wherein the protein is a fusion protein comprising SEQ ID NO:4 and another peptide or polypeptide.

44. (New) An isolated polypeptide encoded by a DNA that hybridizes at 65°C in 2x SSC and 0.1% SDS with a DNA consisting of the complement of nucleotides 9-947 of SEQ ID NO:1.

45. (New) An isolated DNA encoding the polypeptide of claim 44.

46. (New) A vector comprising the DNA of claim 45.

47. (New) A host cell comprising the vector of claim 46.

48. (New) A method of producing a polypeptide, the method comprising cultivating the host cell of claim 47 and recovering the polypeptide expressed therein.